DOCUMENT RESUME

ED 230 357 RC 014 094

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TITLE Analysis of English/Spanish Oral Interaction Between First Grade Mexican-American Children and Teacher-Aides.
PUB DATE May 83
NOTE 34p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Bilingual Education Programs; *Bilingual Students; Code Switching (Language); Cognitive Ability; Dialects; *Grade 1; Interference (Language); Interpersonal Communication; Language Patterns; *Mexican Americans; Primary Education; *Questioning Techniques; *Speech Communication; Structural Grammar; *Teacher Aides

ABSTRACT

Conducted by doctoral students, the study analyzed 3-minute tapes of conversation between 10 Title VII first grade Mexican American students and teacher aides in the Weslaco Independent School District, Texas, to determine the percentage of standard vs. non-standard language, measure the percentage of code switching by aide, show the percentage of language interference by students and aides, and determine whether an adequate questioning technique was used. Usng the Linguistic Analysis Inventory Chart and Question Asking Skills Inventory, a count of errors made by aides and pupils was determined based on the "total words spoken" and "total sentences spoken," a ratio of teacher-error vs. child-error was determined, and a percentage of each category of questions asked (cognitive, convergent, divergent, and evaluative) was determined to show the strengths or weaknesses in overall questioning during an oral language development lesson. Findings indicated that: students were weak while aides were strong in their structural grammar based on a standard vs. non-standard comparison; the percentage of code switching by aides (6%) was not significant; aides spoke 59% of the time while students spoke 41% of the time; the students' and aides' percent of errors were not significant; and 88% of the questions asked by aides were at the recall level. (NQ?)

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ANALYSIS OF ENGLISH/SPANISH ORAL INTERACTION BETWEEN FIRST GRADE MEXICAN-AMERICAN CHILDREN AND TEACHER-AIDES

by

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May, 1983

RC014094

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ACKNOWLEDGEMENT

This project was undertaken and completed under the leadership and guidance of Dr. Salvador Alvarez with the assistance of the doctoral students in Education 622 Linguistics and Education. The members of the class, in alphabetical order, are:

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INTRODUCTION

In analyzing test scores related to oral language development, the Weslaco Independent School District concluded that substantial gains could not be seen in the achievement in spite of concentrated efforts in this area. The school, with a majority of children being of Mexican American descent, was concerned particularly with those children who could not effectively communicate orally in English.

The district designed a plan whereby teacher-aides would be used in the classroom, in direct one-to-one conversation with each of the students. This was in addition to the teacher of the oral language class. It was thought that such additional individualized attention, having the teacher-aide interact with each student, would reflect proportional gains in the oral language development of each child. It was concluded that no substantial results were obtained using this approach.

In an effort to discover reasons for this lack of achievement, the Title VII Director asked Dr. Salvador Alvarez's Education 622 doctoral class for help. The class proposed to analyze the methods and procedures being used by the teacher and teacher-aide during their oral interaction with each child.

DEFINITION OF KEY TERMS

1. dialect - a variation of a language. A different kind of language experience because of social and/or cultural differences.

2. code-switching - the change from one language to the other according to change in the speech situation.

3. interference - the inability to keep both languages from getting mixed up.

4. cognitive memory - the ability to recall, define, identify, name and designate.

5. convergent memory - the ability to explain, state, compare or contrast relationships.

6. divergent memory - the ability to predict, hypothesixe, infor and reconstruct.

7. evaluative memory - the ability to judge, value, defend or justify a choice.

Limitations of the Study

A variety of oral language techniques for first grade students used by the teacher-aide were analyzed. The unknown factors are:

a. educational background of teacher-aides,
b. prior oral language training for teacher-aides,
c. extent of children's home background
d. availability of oral language material
e. child's language dominance was assumed to be Spanish
f. code switching analysis was done as to English only.

Statement of Objectives

Given three-minute samplings of sixteen different children, doctoral students proposed to:

1. determine percentage of standard vs. non-standard dialect
2. measure the percentage of code-switching of teacher aide
3. show the percentage of language interference
4. categorize questions used by aide on students taped as type of memory: cognitive, convergent, divergent and evaluative.

Two tables were devised for classifying raw data: The Linguistic Analysis Inventory Chart (see table 3) and Question Asking Skills Inventory, (see table 4 p. 23).
The analysis was based on doctoral students' tallies while listening to three-minute segments of each of the sixteen teacher-aide and pupils' taped conversations.

REVIEW OF THE LITERATURE: DIALECT, INTERFERENCE

The recent rebirth of bilingual education in the United States has brought with it many socio-educational and socio-linguistic puzzles for which few Americans are prepared. One of these puzzles is the term "dialect". According to Joshua Fishman (2), there are two different definitions of dialect: (a) a linguistic pattern within a greater part-whole language system, and; (b) a pejorative one which implies social inferiority to another pattern which is not a dialect. In evaluating children's speech, the teacher's first responsibility is to understand the dialect of the pupils so that they can be understood and assisted (3).

The use of different dialects in children may be due to the social barriers that separate them. The term

"social dialect" usually refers to a division along socio-economic lines (8). The recognition and acceptance of linguistic diversity is critical in early childhood programs because any approach which stigmatizes a child's speech will probably humiliate him, and certainly will create an environment which is not conducive to learning (8).

INTERFERENCE

Interference is defined as the factors in a student's personality or culture which may get in the way of his acquisition of standard English (7). One of the causes of interference may be the fact that in the Southwest there are individuals with varying degrees of Mexican or Anglo identificational patterns, and these genuine human responses must be respected (6).

A problem that frequently occurs in the linguistic development of bilingual children is code-switching: the use of two different language patterns intermittently. The reasons for "conscious" code-switching, when the speaker is aware that he is mixing the two languages, are not known. It has been suggested by Gumpertz and Hernandez that the relationship to the speaker is influential. In a familiar situation more code-switching occurs. It is interesting though, that socio-economic class also affects code-switching (4). An interesting observation done by Gumpertz and Hernandez (5),

expand the notion, seeing a very direct functional similarity between code-switching on one hand and style switching within a single language on the other.

The ability to switch codes effectively is recognized in many bilingual communities as an ability to be admired and cultivated. The switching itself communicates subtle meanings and perhaps most importantly, identifies the speaker as a member of a bilingual rather than the monolingual community (8). In other communities, code-switching is avoided. For example, the middle class Puerto Rican families take pride in keeping the spoken language separated (4).

Still another form of interference is psychological interference which can occur at the cognitive level, or at the psychomotor level, or may result from unguided imitative behavior. There are many factors that affect the degree of interference. These include: aptitude and intelligence, motivation, age, and teaching methods and materials (7).

In regard to linguistic interference, there are five areas to take into consideration:

a. Phonological Interference (8). This type of interference occurs as a result of the substitution of Spanish sounds for the English sound they most closely resemble.

b. Syntactical Interference. Syntactical interference occurs as a result of the difference in word order. Lance (5) notes as important syntactic difference from the modern standard. This is the use of the imperfect verb forms in certain constructions in which the standard uses either the past subjunctive or the conditional inflections result in a sentence like:

Yo les daba (daría) el dinero pa ver si (se irían) se iban, or, What is that again called?

c. Morphological Interference (2). This interference is the result of the difference in Spanish and English and reflects tense, gender, person, and number.

She's sit down.

The little boy saw him and point at him.

The little boy went to school and he plays.

I don't know no stories. (double negatives)

d. Lexical Interference (2). Lexical interference is the selection of the appropriate word. A major lexical problem that the students had both in English and Spanish was to choose the appropriate word:

The boy see one book. (looked at)

The other boy came behind her and started hearing the story too. (listening to)

e. Semantical Interference. Semantical interference occurs when the real meaning expressed in one language does not offer an equivalent translation in the second language.

I win her. (I beat her.)

There are five areas of phonological interference. These five problems account for the majority of errors in the English of Spanish-speaking children. These errors occur as a result of the substitution of Spanish sounds for the English sound they most closely resemble. This interference is characteristic of almost all second language learning situations and is to be expected.

The types of errors are:

1. Vowel change and glide amplification:

/iy/	>	/i/	meat	>	mitt
/i/	>	/iy/	mitt	>	meat
/ey/	>	/e/	mate	>	met
/e/	>	/æ/	met	>	mat
/æ/	>	/e/	mat	>	met
/ə/	>	/ɔ/	but	>	bought
/uw/	>	/u/	fool	>	full
/ow/	>	/c/	boat	>	bought

2. Final devoicing of consonants:

/z/	>	/s/	raise	>	race
/d/	>	/t/	add	>	at
/v/	>	/f/	/liyvz/	>	/liyfs/ > /lifs/

3. Cluster reduction:

   a. Loss of "t" and "d" in final position:

   second > secon

   let's > les

   brackets > brackes

   b. Addition of "e" in initial position (epenthetic /e/):

   spinach > espinach

   sticky > esticky

4. c - s interchange:

cherry > sherry

match > mash

share > chair

5. Stress changes: Generally all levels of stress, other than the loudest primary stress within the utterance, are reduced to a weak stress. In addition, where a specific phrase requires a secondary stress, a primary stress may be used. The ultimate effect is that of alternating strong and weak stress much like that in counting, listing, etc.

   cylinder > /silender/ > /siliynder/

   satiny > /æ tiniy/ > /sæ tiyniy/

The statistical information is helpful to educators involved in bilingual programs and to administrators who have to make decisions in financing those programs, but the description of the deviant forms, however, is of more direct benefit to those involved in teaching children (2).

PROCEDURES: DATA GATHERING

A series of 16 tapes were analyzed using the Linguistic Analysis Inventory Chart and the Question Asking Skills Inventory. The errors were categorized and tallied on the Linguistic Analysis Inventory Chart. A count of the errors made by the teacher aide and by the pupil was determined based on the "total words spoken" and "total sentences spoken". A ratio of teacher-error vs. child-error was also determined.

On the Question Asking Skills Inventory a tally of the kinds of questions asked was kept and a percentage of each category was determined to show the areas of strength

or weakness in overall questioning during an oral language development lesson in the First Grade at Weslaco ISD.

DESCRIPTION OF THE MEASURING INSTRUMENTS

Before measuring instruments could be designed for this study, the objectives of the research had to be established. The main objectives could be divided under the following headings:

1. Types of questions being asked.
2. Use of standard versus non-standard language.
3. Percentage of teacher-aide talk versus child-talk.
4. Degree of linguistic-interference.
5. Use of code-switching by aide.

In order to design an instrument for measuring or evaluating questioning tecniques, the criteria was based on levels of cognition. It is a well documented fact that many times teachers and instructional personnel are not aware of the different cognitive level responses that can be obtained from children, if only the correct questions are asked. Training in question asking skills should be a priority in any school district. According to Benjamin Bloom's (1) levels of cognition, thinking can be divided and reflected in four areas: cognitive memory, convergent and divergent thinking, and evaluative thought. The design for one of the inventories is based on this concept of cognitive levels.

The "Question Asking Skills Inventory" was designed to incorporate the four cognitive levels with each category

further divided into different question types. A tally space was provided so that each question asked by the aide could be categorized. Totals and grand totals can be obtained for the individual categories and for the types within the categories.

In order to measure objectives numbers 2 through 4, a "Linguistic Analysis Inventory Chart" was designed. In any bilingual program, a major emphasis should be the expansion of the child's language or languages. In order to do so, certain language assumptions have to be developed in the area of standard versus non-standard forms and linguistic interference.

The doctoral class carefully listened to the language of both the aide and children in order to discover what percentage of standard versus non-standard language was being used in the classroom. Also, linguistic interference, in its essential five components, was recorded.

The "Linguistic Analysis Inventory Chart" was designed so that both the dialect (standard versus non-standard English and Spanish) and linguistic interference could be recorded. Under the general heading of Interference, the following areas were included: phonological, morphological, lexical, syntactic, and semantic.

Another section in the chart included entries in the area of "code-switching." Objective 5 deals with the type and/or purpose of switching from one language to

another (on the part of the aides). The switching of languages for instructional purposes is known as the Concurrent Approach. This strategy, based on pedagogically justifiable rationale, can and should be used only if it will help accomplish a specific learning goal. Therefore, code-switching can be categorized into eight basic types: praise, reprimand, courtesy, arbitration, conceptual reinforcement, review, capturing attention, and lexical enrichment. Evidently, some types are preferred for use in biligual classrooms.

To summarize, the three part "Inventory Chart" provides the reader with information concerning the four objectives under the three major divisions: dialect, interference, and code-switching.

DATA ANALYSIS

(3 Minute Random Sample of 18 Audio Tapes)

Number of Sentences Used: (10% ± is considered significant)

A total 654 sentences were spoken. The aides spoke 59% of the time while the students spoke 41% of the time. A difference of 18% is significant if the ultimate goal of the lessons is to get the students to develop their oral language.

Ninety percent of the sentences spoken by the aide were correct while the students had a score of 67% correct. The 67% figure is a significant figure, and attention should be given to correcting the student's grammar. (Standard versus Non-Standard).

Spanish-English Code-Switching: (10% ± is considered significant)

Thirty-eight of the 654 sentences spoken had code-switching, or 6% of the total number of sentences which is not significant.

Seventy-five percent of the code-switching done was for praise, conceptual reinforcement, and capturing attention. Twenty-five percent was arbitrary or for courtesy, reprimand, or lexical enrichment.

Linguistic Interference: (10% ± is considered significant)

A total of 3,596 words were spoken. The aides spoke 65% of the words while the students spoke 35% of the words. A difference of 30% is significant if the ultimate goal of the lessons is to get the students to develop their oral language.

Ninety-eight percent of the words spoken by the aide were in correct form while the students' words were 91% correct. The 91% correctness of the students' words could very well mean that overall the students are learning the language. Nine percent of the students' errors could be due to the language development as well as interference. The percent of student errors is not significant.

Question Asking Skills of Aides:

A total of 170 questions were asked. Based on the taxonomy of the cognitive domain, 85% of the questions were asked at the lowest level of critical thinking, the cognitive memory level; and 96% of the questions were asked at the lowest two levels of critical thinking, the cognitive memory and the divergent levels. Only 4% of the questions were asked at the two highest levels of critical thinking, the divergent and the evaluative levels.

The amount of questions being asked at the lowest two levels of critical thinking is significant, and special attention should be given to remedying the situation.

Negative Observations:

1. The students were weak in their structural grammar based on a standard vs. non-standard comparison.

2. The aides were speaking 30% more than the students based on a percent ration of 65 to 35. In oral language development lessons, students should speak at least 75% of the time. Based on this norm of 75%, the aides were speaking 40% more than they should. Instead they should let the students speak 40% more.

3. The aides were asking 85% of the questions at the lowest level of critical thinking on the cognitive domain with 96% of the questions being asked at the lowest two levels. Emphasis should be given to critical thinking at the highest levels of the cognitive domain since the leads to mental growth is directly related to language development.

Positive Observations:

4. Ninety percent of the sentences spoken by the aide were grammatically correct based on a standard vs. non-standard comparison.

5. Only 6% of the total number 654 sentences spoken were related to code switching which is surprisingly very little and also very good for the type of child (bilingual) and lesson (oral language) being used.

6. Ninety eight percent of the words spoken by the aide were spoken in correct form.

7. Only 9% of the words spoken by the students were not in correct form and some of the errors made on this small percentage could be due to language development rather than interference.

GENERAL OBSERVATIONS

It was agreed that the class could not determine the child's dominant language as taped; it was decided that only a personal interview, or a formal test, or a combination of both, could be instrumental in determining language dominance.

In order to determine the Teacher Aides' Questioning Technique, a form was designed (see Table 1, page 21). Each doctoral student marked on this form while listening to the tapes.

The total observation made by all doctoral students can be seen in Table 6, page 62 and Table 8, page 64. A high percentage of "Recall Questions" (88%) and a low percentage (0%) in the "Divergent" and "Evaluative" areas. point out the area of training most urgently needed.

In order to determine the percentage of "Teacher Aide Talk" and "Child Talk" a form was designed (see Table 2, page 40). Each doctoral student marked on this form while listening to the tapes. In addition, the number of sentences as well as the total number of utterances were counted.

A close look at Table 3, Column 7, page 59, shows evidence that some Aides talked as high as 94.12 percent of the time and as low as 5.08 percent of the time. The students talked as high as 94.91 percent of the time and as low as 5.88 percent of the time.

In order for the researchers to measure the Dialectical Differences between students and Aides, a portion of Table 2 was designed strictly for this purpose (see the eight central columns of this form). As explained in Section III, the categories were used to mark any code-switching within these categories, as expressed by the Aides. Each doctoral student marked on this portion of the form, while listening to the tapes.

A close look at Table 4, page 60, shows a high of 7 under "Praise" and a low of 1 in "Courtesy", "Arbitrary",

Conceptual Reinforcement", Capturing Attention" and the "Lexical Enrichment" areas.

"Code-switching" as defined in Section II is an area where no final agreement has been reached in Bilingual Education; therefore, these scores are not "good" nor "bad" — they simply indicate the number of times it occurred.

In order for the researchers to determine the Degree of Interference in Child and Aide conversation, a portion of Table 2 was designed strictly for this purpose. Each doctoral student marked on this portion of the form while listening to the tapes.

A close look at Table 5, page 61, shows evidence of Interference as high as 89.96% and as low as 5.08% on the part of the Aides, while it shows Interference as high as 93.65% and as low as 10.04% on the part of the pupil.

Interference, to a lay person, may mean "a Spanish or English accent", or the building of sentences in one language using the construction proper in the other languages, or the mixing of "genders", "persons" and "number"; or the "Spanglish" use in certain words, or the lack of an adequate translation.

A composite score for "Dialect", "Code-switching", and "Interference" can be seen on Table 7, page 63; the production of correct language use in 90% for the Aide and 67% for the pupil, (Dialectic portion of the form). This portion also shows that the Aides used 386 sentences for a 59%

of language production while the students used 268 sentences for a 41% of the time of language production.

The center portion of this form, Table 7, shows two highs of 10 while "Praising" or "Conceptually Reinforcing" and two lows of 1 in the "Courtesy" and "Enrichment" areas. No time was observed to be dedicated to the "Review" area.

The extreme right hand portion of this form, Table 7, shows a high of 98% of correct language usage by the Aide and a high of 91% of correct language usage by the child. This portion also shows that the Aides spoke 2,321 words for a 65% rate, while the pupils used 1,275 words for a 35% rate.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

The purpose of this study was to analyze tapes of Title VII first grade children and teachers aides by:

a. determining the percentage of standard vs. non-standard language;

b. measuring the percentage of Code Switching of the Teacher Aide;

c. showing the percentage of language interference experienced by students and teacher aides; and

d. determining whether an adequate questioning technique was used.

The study seems to support several conclusions.

CONCLUSIONS

1. The students were weak in their structural grammar on the basis of a standard vs. non-standard comparison. (Table 7: Dialect, Child Percent Correct, 67%)

2. The Aides were strong in their structural grammar on the basis of a standard vs. non-standard comparison. (Table 7: Dialect, Aide Percent Correct, 90%).

3. The percent of Code Switching of the Aides was not significant.

4. The student's percent of errors was not significant.

5. The Aides' percent of errors was not significant.

6. Questioning Technique, used by aides showed most of questions (88%) at the Recall Level.

RECOMMENDATIONS

1. For students weak in grammar, additional grammar practice, orally and written, appears to be valuable.

2. The strong grammar background of teacher-aides should be used to advantage for recommendation number one.

3. Since code switching among Aides is not significant, it appears that code switching is merely used as a device to clarify a point in class.

4. Since language interference among students and aides does not appear to be significant, it may be treated as part of a cultural milieu of the Spanish dialect of this area.

5. Inservice Training. On-going inservice training for teachers and teacher-aides on the use of more effective questioning techniques in order that they may improve the higher mental process of students in the Oral Language Program.

6. Language Development Lessons. Teachers and teacher aides need to plan together. The Language Development Lessons should allow students to speak much more than the percent of time used by the children of this study. Teachers should provide a standard language model for the children to imitate irregardless of the number of languages used within the school community.

7. Finally, in an effort to facilitate the evaluation of oral language development in the Weslaco Independent School District, now that these first graders have become accustomed to tape recorders, have these children speak directly into the microphone; this will greatly enhance the proper evaluation by any member selected for this task.

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APPENDICES

TEACHER CODE

	CATEGORIES	TALLY	TOTAL	PERCENT OF GRAND TOTAL
COGNITIVE MEMORY	1. Recall			
	2. Identify/Observe			
	3. Yes or No			
	4. Define			
	5. Name			
	6. Designate			
CONVERGENT	1. Explain			
	2. State Relationship			
	3. Compare and Contrast			
DIVERGENT	1. Predict			
	2. Hypothesize			
	3. Infer			
	4. Reconstruct			
EVALUATIVE	1. Judge			
	2. Value			
	3. Defend			
	4. Justified Choice			

Table #3

LINGUISTIC ANALYSIS INVENTORY CHART

INTERFERENCE - STRUCTURE

(Three Minute Random Sample of Audio Tape)

Names - Child/Aide	1 Aide Total Words Structure	2 Pupil Total Words Structure	3 Aide Errors	4 Pupil Errors	5 Aide Percentage Correct	6 Pupil Percentage Correct	7 Aide Percentage Ratio to	Pupil Percentage Ratio
1. Noemi Lozano	11	14	0	13	100.00%	7.14%	44.00% to	56.00%
2. Tape 3 Side 1	13	4	1	2	93.00%	50.00%	76.00% to	24.00%
3. Joe Chavez	3	15	0	15	100.00%	0.00%	16.67% to	83.83%
4. Tape 2	3	56	0	13	100.00%	77.00%	5.07% to	94.91%
5. Tape 1	31	40	2	6	94.00%	85.00%	43.56% to	56.33%
6. Tape 4 Side 1	20	12	3	5	85.00%	52.00%	72.00% to	28.00%
7. Tape 1 Javier	16	1	3	0	81.00%	100.00%	94.12% to	5.88%
8. Eddie	10	1	2	0	80.00%	100.00%	90.91% to	9.09%
9. Tape 5 Herrera-Saenz	30	7	3	4	90.00%	43.00%	81.08% to	18.92%
0. Yvonne	52	22	3	1	94.00%	95.00%	70.27% to	29.73%
1. Mark	33	19	1	7	97.00%	63.00%	63.46% to	36.54%
2. Tape 4 Herrera-Saenz	32	7	0	3	100.00%	58.00%	82.00% to	18.00%
3. Tape 5 - Side 2 Tommy	3	18	0	3	100.00%	83.00%	14.29% to	85.71%
4. Tape 5 - Side 1 Mario	32	16	6	4	81.00%	75.00%	66.67% to	33.33%
5. Tape 6 Saenz	71	23	11	11	86.00%	67.00%	75.00% to	25.00%
6. Tape 5 Canales	26	13	4	2	85.00%	85.00%	66.60% to	33.30%
7.								
8.								
9.								
0.								
COMPOSITE SCORES	386	268	39	89	90.00%	67.00%	59.00% to	41.00%

Table = 4

LINGUISTIC ANALYSIS INVENTORY CHART

TIMES CODE SWITCHING OCCURRED

	1	2	3	4	5	6	7	8	9
Name of Aide	Praise	Reprimand	Courtesy	Arbitrary	Conceptual Reinforcement	Review	Capturing Attention	Lexical Enrichment	Total
1. Noemi Lozano									-0-
2. Tape 3 Side 1									-0-
3. Joe Chavez									-0-
4. Tape 2									-0-
5. Tape 1									-0-
6. Tape 4 Side 1									-0-
7. Tape 1 Javier				1					1
8. Eddie									-0-
9. Tape 5 Herrera-Saenz				1	4				5
10. Yvonne				2	1		1		4
11. Mark									-0-
12. Tape 4 Herrera-Saenz									-0-
13. Tape 5 Side 2 Tommy		3							3
14. Tape 5 Side 1 Mario	7								7
15. Saenz	3		1		5		5	1	15
16. Canales Tape 5							3		3
17.									
18.									
19.									
20.									
GRAND TOTAL	10	3	1	4	10		9	1	38

Table - 5

LINGUISTIC ANALYSIS INVENTORY CHART

INTERFERENCE - SPOKEN

(Three Minute Random Sample of Audio Tape)

	1	2	3	4	5	6	7
Names - Child/Aide	Aide Total Words Spoken	Pupil Total Words Spoken	Aide Errors	Pupil Errors	Aide Percentage Correct	Pupil Percentage Correct	Aide Percentage Ratio to Pupil Percentage Ratio
Noemi Lozano	53	89	0	18	100.00%	85.00%	37.32% to 62.68%
Tape 3 Side 1	150	89	4	12	94.00%	76.00%	63.00% to 38.00%
Joe Chavez	8	74	3	15	37.00%	63.00%	9.75% to 90.25%
Tape 2	31	40	0	0	100.00%	100.00%	43.66% to 56.34%
Tape 1	3	56	0	16	100.00%	72.00%	5.08% to 94.92%
Tape 4 Side 1	155	108	2	8	99.00%	93.00%	59.00% to 41.00%
Tape 1 Javier	101	12	3	0	97.00%	100.00%	89.38% to 10.62%
Eddie	67	11	0	0	100.00%	100.00%	85.90% to 14.10%
Tape 5 Herrera-Saenz	210	54	2	2	99.00%	97.00%	80.00 to 20.00%
Yvonne	251	28	0	7	100.00%	75.00%	89.96% to 10.04%
Mark	165	172	8	12	95.00%	93.00%	48.96% to 51.04%
Tape 4 Herrera-Saenz	283	70	0	6	100.00%	91.00%	79.00% to 21.00%
Tommy Tape 5 Side 2	16	236	0	3	100.00%	99.00%	6.35% to 93.65%
Mario Tape 5 Side 1	232	78	0	1	100.00%	99.00%	74.84% to 25.16%
Saenz Tape 6	440	95	7	11	84.00%	88.00%	82.00% to 18.00%
Canales Tape 5	157	63	7	3	56.00%	53.00%	71.40% to 28.60%
COMPOSITE SCORES	2321	1275	36	114	98.00%	91.00%	65.00% to 35.00%

Composite

LINGUISTIC ANALYSIS INVENTORY CHART

	DIALECT				*CODE-SWITCHING								INTERFERENCE				
	ENGLISH		SPANISH														
	1 S.	2 N.S.	3 S.	4 N.S.	5 Praise	6 Reprimand	7 Courtesy	8 Arbitrary	9 Conceptual Reinforcement	10 Review	11 Capturing Attention	12 Lexical Enrichment	13 Phon.	14 Morph.	15 Lex.	16 Syn.	17 Sem.
AIDE					10	3	1	4	10	0	9	1					
CHILD																	

*This item Enters Only to the Aides.

- DIALECT

TOTAL SENTENCES SPOKIN		ERRORS
AIDE	386	39
CHILD	268	89
PERCENT RATIO	59.00%	AIDE PERCENT CORRECT 90.00%
	41.00%	CHILD PERCENT CORRECT 67.00%

- INTERFERENCE

TOTAL WORDS SPOKEN		ERRORS
AIDE	2321	36
CHILD	1275	114
PERCENT RATIO	65.00%	AIDE PERCENT CORRECT 98.00%
	35.00%	CHILD PERCENT CORRECT 91.00%

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COMPOSITE

QUESTIONS ASKING SKILLS INVENTORY

Table #8

TEACHER CODE

	CATEGORIES	TALLY	TOTAL	PERCENT OF GRAND TOTAL
COGNITIVE MEMORY	1. Recall		88	52.00%
	2. Identify/Observe		7	4.00%
	3. Yes or No		19	11.00%
	4. Define		5	3.00%
	5. Name		16	9.00%
	6. Designate		10	6.00%
				85.00%
CONVERGENT	1. Explain		17	10.00%
	2. State Relationship		0	0.00%
	3. Compare and Contrast		2	1.00%
				11.00%
DIVERGENT	1. Predict		1	1.00%
	2. Hypothesize		0	
	3. Infer		0	
	4. Reconstruct		0	
				1.00%
EVALUATIVE	1. Judge		5	3.00%
	2. Value		0	
	3. Defend		0	
	4. Justified Choice		0	
				3.00%